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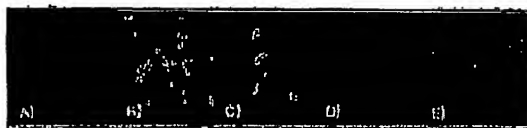
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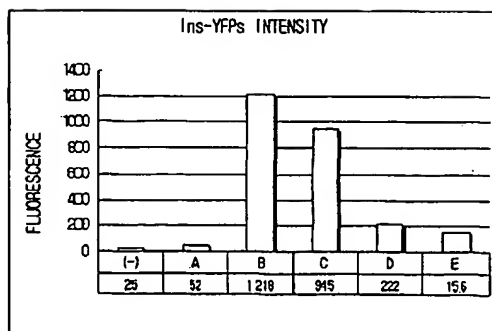
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[Continued on next page]

(54) Title: **ENHANCED INSERTED YELLOW FLUORESCENCE PROTEIN AND ITS APPLICATION**

A



B

(57) Abstract: Disclosed are mutated genes for green fluorescence proteins and enhanced inserted YFPs expressed therefrom. The mutant proteins not only maintain their fluorescence even at 37 °C, but also exhibit about 20 times stronger fluorescence intensities in comparison to the conventional fluorescence proteins. Accordingly, the mutant fluorescence proteins of the present invention can be used as biosensors for detecting and analyzing the bioactivities of desired materials.

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